SELECT TO VIEW:

Figure 1 Overview of Possible Eastern and Western Alignments

SELECT TO VIEW:

Figure 2 Property Ownership for Takoma Area

In order to effectively evaluate the opportunities and constraints associated with each alignment, they have been broken down into mutually exclusive segments. Rather than evaluate an entire alignment, smaller segments that make up the alignment are evaluated individually. A segment may be shared by one or more proposed alignments. Similarly, segments from different alignments can be pieced together to form new alignments. Section 5 of this study provides an overview of each alignment and defines the segments involved. A map showing the specific segments making up the alignment is included. This section also includes a summary matrix for each segment within the alignment as well as an estimated cost to construct the entire alignment.

Section 6 presents three matrices that summarize the key issues associated with the segments making up the eastern and western alignments, respectively and for the alignments in their entirety. Each segment is evaluated against specific criteria that have been developed to address issues relevant to siting bike trails. The criteria take into consideration issues identified by DDOTs with input from citizens, community organizations, bicycling advocate groups, and other public agencies and officials. Appendix A contains a list of comments from these interviews. Appendix B outlines preliminary comments received by the National Park Service (NPS) regarding the proposed alignments as they relate to NPS-owned land. The following is a list of the criteria used in the matrix:

1. **Continuity:** The number of street intersections and turns that trail users will have to navigate. The lower the number, the better the score.
2. **Elevation Change:** The amount of elevation change for a segment of trail. The flatter or more gradual a segment, the better the score.
3. **Trail Access:** Access to the trail from the surrounding neighborhoods.
4. **Metro Access:** Access between the trail and the Metro station.
5. **Trail Safety:** Safety of trail users from adjacent and crossing vehicle traffic.
6. **Personal Security:** Level of personal security from crime in terms of trail location, design, lighting, integration into high activity areas, police presence, etc.
7. **Neighborhood Impact:** Impacts to the adjacent businesses and homeowners and the surrounding neighborhood.
8. **Environmental Impact:** Impacts to the following resources: water (including stormwater runoff), vegetation, noise, and historic properties.
9. **Economic Development:** Potential for the trail to spur economic activity in adjacent business districts, particularly the 4th St. district.
10. **Aesthetics of Trail:** Appearance of the trail from observers off the trail.
11. **Construction Costs:** Estimated costs to build separate sections of the trail.
12. **Land Acquisition:** Estimated costs to acquire land to site the trail.

Segments are rated relative to these criteria in the matrices as GOOD, AVERAGE, or POOR. A rating of POOR indicates the potential for appreciable adverse impacts relative to that criterion, while a rating of GOOD equates to relatively low or beneficial impacts. With respect to land acquisition, construction costs, and neighborhood and environmental impacts, the segments are rated either LOW, MODERATE, or HIGH.

These adjectives are used to make the analysis easier to understand. While DDOT and the Consultants have attempted to be as objective as possible, these ratings use subjective terms. For instance, the Study's reporting for Aesthetic Qualities may be "Average" while an individual's may be "Good". The public comment period will provide citizens with an opportunity to differ or concur with the data presented in the study. To more easily distinguish the relative opportunities and constraints associated with each segment, the following icons have been assigned to ratings and placed in the summary matrices. Construction costs have dollar estimates at the end of each alignment description and in Appendix C.

Low ● **Good**

Moderate ◉ **Average**

High ○ **Poor**

5 ALIGNMENT DESCRIPTIONS AND OVERVIEW

Sections 5.1 and 5.2 describe the eastern and western alignments, respectively. For consistency, the descriptions of the routes of each alignment begin in the south and terminate in the north.

5.1 EASTERN ALIGNMENTS

Three eastern alignments are analyzed in this study. They are Alignment A, Alignment B, and Alignment C.

5.1.1 Alignment A (Consisting of Eastern Segments 1, 2, and 5)

Eastern Segment 1 (Used in Alignment A, B, and C)

Route (south to north): Begin at the intersection of Kansas Avenue, North Dakota Avenue, and Blair Road. Travel north on Blair Road to Van Buren Street. Turn right to pass through rail line tunnel. Turn left on Sandy Spring Road. Turn right on Maple Street to corner of Maple Street and Vine Street.

Blair Road from its intersection with Kansas Avenue and North Dakota Avenue to the intersection with Van Buren Street would be designed as an on-road two-way bicycle path. The northbound lane of traffic nearest the sidewalk would be removed to accommodate the bike trail with a physical barrier separating the traffic and the trail. This area is predominantly residential

with a mix of detached homes and apartment buildings. The Blair Road portion of this segment has relatively heavy traffic levels, particularly during morning and evening rush hours (Photo 4). Sandy Spring Road is a mix of residential uses to the east and industrial uses to the west (Photo 5). The trail on Maple Street, Sandy Spring Road, and portions of Van Buren Street can be designed as an off-street sidepath or combination of sidewalk and shared roadway.

Eastern Segment 1 Criteria and Descriptions

Brief Description		Blair Rd. to Van Buren to Sandy Spring to Maple; all on road. Used in Alignments A, B, C.
Continuity	◐	**AVERAGE.** Three (3) intersection crossings.
Elevation Change	◐	**AVERAGE.** Steep hill on Blair Rd. from Van Buren to Underwood St. Flat for the remainder of the segment.
Trail Access	◐	**AVERAGE.** The majority of this segment travels on streets dominated by residential development. However, commercial & industrial uses are nearby (e.g., Sandy Spring Road).
Metro Access	◐	**AVERAGE.** Nearby Metro Station and bus stops.
Trail Safety	◐	**AVERAGE.** Traffic separated sidepath on Blair Rd. Once trail turns onto Van Buren, streets have much lower traffic volume and trail can share the road.
Personal Security	◐	**AVERAGE.** Blair Rd. is well-lit and heavily traveled; other streets have less lighting and less activity.
Economic Development	○	**POOR.** Segment does not travel along commercial/retail corridor.
Aesthetics of Trail	◐	**AVERAGE.** Segment is a sidepath on Blair Rd. and shared roadways on other streets. It does not affect surrounding areas.
Neighborhood Impact	●	**LOW.** On-street trail retains adequate automobile rights-of-way. No private property involved.
Environmental Impact	●	**LOW.** Would have little or no additional environmental impacts.
Construction Costs	●	**LOW.** Involves construction/design of dedicated lane along Blair Rd.
Land Acquisition	●	**LOW.** Involves removal of traffic lane along Blair Rd.

Low ● Good Moderate ◐ Average High ○ Poor

Photo 4. Proposed two-way bike path on Blair Road looking north as part of Segment 1 (Alignments A, B, C, and part of D).

Photo 5. Looking north on Sandy Spring Road at intersection with Van Buren Street. Sandy Spring Road would be used as part of Segment 1. (Alignments A, B, and C).

Eastern Segment 2 (Used in Alignment A Only)

Route (south to north): Travel west on Vine Street towards the Metro line. Travel north along the Metro line within the western boundary of the Elevation 314 development (Photo 6). Cross Carroll Street via a bridge at grade with the rail line until reaching the north side of the Metro entrance near the elevator. An entry/exit ramp would be constructed at this point to allow access to the Metro Station.

The trail runs within the western boundary of the Elevation 314 development. The design of the apartment building, influenced by the constraints of the site, will not accommodate the trail. Nonetheless, this segment is evaluated in this study because it has been part of previous trail studies and the Takoma Central District Plan.

Eastern Segment 2 Criteria and Descriptions

Brief Description		Vine St. to Elevation 314 development, across Carroll St. on a bridge, above Metro entrance to Metro elevator. Used in Alignment A only.
Continuity	●	**GOOD.** Zero (0) intersection crossings.
Elevation Change	●	**GOOD.** Flat, minimal change in grade.
Trail Access	○	**POOR.** Trail segment provides access to residential areas near Maple and Vine. Single ramp down to Metro elevator entrance at north end of segment.
Metro Access	●	**GOOD.** Direct ramp down to Metro Station and bus stops.
Trail Safety	●	**GOOD.** Bridge overpass eliminates conflicts with Carroll St. and Metro entrance.
Personal Security	◘	**AVERAGE.** Vine St. and Sandy Spring are less traveled and not well-lit. However, trail portion along rail line affords excellent visibility within a high activity area. Good police presence.
Economic Development	○	**POOR.** Provides limited access at the Metro station to commercial/retail along 4th, Carroll, and Cedar Streets.
Aesthetics of Trail	◘	**AVERAGE.** Trail is highly visible above Carroll St underpass and above the Metro station entrance.
Neighborhood Impact	○	**HIGH.** This segment would require acquisition of a portion of private property on which the Elevation 314 development is under construction.
Environmental Impact	◘	**MODERATE.** Would require stormwater runoff remediation for grade separated trail. No vegetation affected.
Construction Costs	○	**HIGH.** Bridge over Carroll St. and trail along rail line would be costly to design/construct.
Land Acquisition	○	**HIGH.** Requires property acquisition of portion of private property and WMATA property.

Low ● Good Moderate ◘ Average High ○ Poor